**Question:** What is the correct balanced equation for the reaction of potassium hydroxide with sulfuric acid?

Take your time, do this carefully in THREE stages…

Firstly, write the word equation **potassium hydroxide + sulfuric acid 🡪 potassium sulfate + water**

Secondly, use the ions table in your resource booklet to write the chemical formula for the reactants and products

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **potassium hydroxide** | **sulphuric acid** |  | **potassium sulfate** | **water** |
| K+ OH-  *scribble down your rough notes on paper* | H2SO4 learn this!  the other less common name is hydrogen sulfate  H+ SO42-  H+ |  | K+ SO42-  K+ | H2O  you KNOW this, don’t you!!!??? ☺ |
| **KOH** | **H2SO4** |  | **K2SO4** | **H2O** |

Finally, count the atoms on each side of the equation *(use numbers or draw circles/shapes)*

|  |  |
| --- | --- |
|  |  |

and if needed adjust the number molecules or compounds by writing a BIG number in front

**2KOH + H2SO4 🡪 K2SO4 + 2H2O**

This is the correct balanced equation.

© <https://www.chemical-minds.com/>